

REMARKS

This Response is submitted in response to the outstanding final Office Action, dated May 3, 2006. Claims 1 through 22 are presently pending in the above-identified patent application.

In the Office Action, the Examiner rejected claims 1-22 under 35 U.S.C. §112, first paragraph, 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. In addition, the Examiner rejected claims 1, 3, 13, 15, and 21 under 35 U.S.C. §103(a) as being unpatentable over Braddy (United States Patent Number 6,304,967) in view of Yoakum et al. (United States Patent Number 6,421,674), rejected claims 2, 4, 5, 14, and 16 under 35 U.S.C. §103(a) as being unpatentable over Braddy and Yoakum in further view of Gampper et al. (United States Patent Number 6,442,601), rejected claim 6 under 35 U.S.C. §103(a) as being unpatentable over Braddy and Yoakum in further view of Smith (United States Patent Number 6,341,311), rejected claims 7, 9-11, 17, (19), 20, and 22 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Jordan (United States Patent Number 6,438,652), and rejected claim 12 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa and Jordan in further view of Smith (United States Patent Number 6,341,311).

Formal Rejections

Claims 1-22 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. With regard to claims 1, 13, and 21, the Examiner asserts that it is apparent that the step of determining whether a given file type satisfies one or more predefined criteria based on a size of files of the given file type is not performed at the client and the specification fails to provide support for the client performing such an operation.

Applicants have not alleged that the step of determining whether a given file type satisfies one or more predefined criteria based on a size of files of the given file type is performed at the client, and the claims do not require that this feature is performed by the client. Rather, the client performs the steps of (i) receiving at said client a request for said web resource; (ii) determining if said web resource is a heavy file type; (iii) and redirecting by said client said web resource request to a proxy server associated with said heavy file type when it is determined that said web resource is said heavy file type. In addition, while “a given file type is determined to be said heavy file type if

said given file type satisfies one or more predefined criteria based on a size of files of said given file type,” this determination ***need not be*** performed by the client. In fact, as recognized by the Examiner this determination can be made by another entity, and recorded in a table that is provided to and accessed by the client to determine if a file type is a heavy file type (see, e.g., page 7, lines 18-25).

5 Accessing a table that indicates whether a given file type is a heavy file type satisfies the limitation “determining if said web resource is a heavy file type” and such feature is clearly described in the Specification. In other words, the determination is made by accessing the table. The fact that the table is populated by another entity does not alter the analysis.

10 Similarly, with regard to claims 7, 17, and 22, the Examiner asserts that “the client merely examines a table to determine whether a domain is a heavy domain. The client itself does not determine if the traffic volume of the domain satisfies one or more predefined criteria. It merely determines if the domain appears in the proxy selection table.” Again, accessing a table that indicates whether a given domain is a heavy domain satisfies the limitation “determining if said web resource request is served by a domain having a traffic volume that satisfies one or more predefined
15 criteria” and such feature is clearly described in the Specification. In other words, the determination is made by accessing the table. The fact that the table is populated by another entity does not alter the analysis.

Applicants respectfully request withdrawal of the Section 112 rejections.

Independent Claims

20 Independent claims 1, 13, and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Braddy in view of Yoakum et al., and claims 7, 17, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sharma et al. in view of Jordan.

25 Regarding claims 1, 13, and 21, the Examiner asserts that Braddy discloses redirecting said web resource request to a server associated with said heavy file type (*citing* col. 15, line 61, to col. 16, line 3; col. 13, lines 50-64). In addition, the Examiner asserts that Braddy examines a request to determine the file type of the request, such as “html,” gif,” and “jpeg” or other MIME types. (*citing* Braddy at col. 15, lines 48- 60).

The Examiner further asserts that a “given file type is determined to be a “heavy file

type if said given file type satisfies one or more predefined criteria based on a size of files” and continues to note that large MIME types such as gif, jpeg and mpeg are significantly larger on average than html files. The mere fact that the files *happen to be* large does not disclose or suggest an *affirmative determination* that they files are a “heavy file type,” as required by claims 1, 13 and

21. Braddy merely determines the file type and forwards the request to the appropriate server.

Again, as indicated in Applicants’ prior responses, Braddy does not disclose or suggest determining if said web resource is a “heavy file type” (e.g., having a file size that exceeds a predefined threshold). Rather, Braddy is redirecting file requests based on the *capabilities* of the server. For example, files of a type “mpeg” are redirected to a video server that has *capabilities* for handling video files. The present invention, on the other hand, categorizes appropriate files as “heavy file types” to separates larger files, so that requests for smaller files are not blocked. Thus, Braddy does not disclose or suggest “determining if said web resource is a heavy file type, wherein a given file type is determined to be said heavy file type if said given file type satisfies one or more predefined criteria based on a size of files of said given file type; and redirecting by said client said web resource request to a proxy server associated with said heavy file type *when* it is determined that said web resource is said heavy file type,” as required by claims 1, 13 and 21, as amended.

In addition, each of the independent claims emphasize that the techniques of the present invention to distribute file types with large mean sizes, referred to as “heavy file types” are performed on the *client-side*. Support for this amendment is shown in FIGS. 1 and 4 of the original specification, and the corresponding textual discussion. See, for example, the Title of the Invention, and page 3, lines 24-26, where it is noted that “A given proxy server is selected based on a proxy selection table *maintained by each client*. ”

The Examiner now alleges that the Request Broker is on the client-side, but as noted in client’s previous response, Braddy teaches that “a Filter Module 112 is a *server side* plug-in software module that handles the processing of the request.” (Col. 21, lines 14-16.) Filter Modules 112 are not servers but are components of, for example, the Request Broker 90 (see, FIG. 7) and the **Filter Modules 112 are located in the same machine (server) as the Broker Request Processor 104** (see, FIG. 7). The Examiner did not rebut this contention in the present Office Action.

Thus, Braddy does not disclose or suggest a *client-side* method, system, or article of manufacture for selecting a proxy server storing a web resource from among a plurality of proxy servers, as required by claims 1, 13 and 21, as amended, respectively. The body of each of claims 1, 13 and 21, emphasize the client-side nature of the disclosed techniques. The client-side nature of the present invention enhances the user's browsing experience for all web sites, and not just a web site employing the server side techniques of, for example, Braddy.

Independent claims claims 7, 17 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Jordan.

Regarding claims 7, 17, and 22, the Examiner asserts that Yoshikawa discloses, among other things, determining if said web resource request is served by a domain having a traffic volume that exceeds a predefined threshold; and redirecting said web request to a server associated with said domain. The Examiner notes that Yoshikawa teaches determining a load for each server, citing page 8, line 38, to page 9, line 25.

Yoshikawa provides a client-side mechanism to redirect requests based on load-balancing. A "least loaded ftp server" query identifies the "number of *users* connected to the server." See, section 3.3, page 9, 2d line below Figure 4 caption. Balancing a load based on the *number of users* does not disclose or suggest "determining if said web resource request is served by a domain having a *traffic volume* that satisfies one or more predefined criteria." As indicated in the present specification at page 6, lines 20-22, "(a)s used herein, a "heavy domain" is defined as those domains having a predefined low threshold for *total byte traffic* and *number of requests* on the set of all domains."

The number of users connected to a server does not directly correlate with total byte traffic or number of requests.

Thus, Yoshikawa does not disclose or suggest determining if said web resource request is served by a domain having a *traffic volume* that satisfies one or more predefined criteria, as required by independent claims 7, 17, and 22.

Additional Cited References

Gampper et al. were also cited by the Examiner for disclosing a proxy cache system for saving files of a predetermined minimum size and greater into secondary storage in the cache (col. 6, lines 31-59). Gampper et al. is directed to a system, method, and program for caching files retrieved from a server over a network. (See, Abstract.) Gampper does not address the issue of redirecting web requests to proxy servers.

Thus, Gampper et al. do not disclose or suggest redirecting said web resource request to a proxy server associated with said heavy file type, as required by independent claims 1, 13, and 21, as amended, and do not disclose or suggest determining if said web resource request is served by a domain having a traffic volume that satisfies one or more predefined criteria; and redirecting said web resource request to a proxy server associated with said domain, as required by independent claims 7, 17, and 22.

Smith was also cited by the Examiner for disclosing the access requests in a distributed cache and the addition of a new proxy server into the network (FIG. 11; col. 18, lines 49-53). Smith does not address the issue of considering file type when redirecting web requests to a proxy server. In addition, although Smith considers load factor to assign some proxy servers proportionately more URL data objects, the load factor is “incorporated in the creation of the combined hash values” (col. 5, lines 25-28) and is thus performed prior to receiving the web resource request.

Thus, Smith does not disclose or suggest redirecting said web resource request to a proxy server associated with said heavy file type, as required by independent claims 1, 13, and 21, as amended, and does not disclose or suggest determining if said web resource request is served by a domain having a traffic volume that satisfies one or more predefined criteria; and redirecting said web resource request to a proxy server associated with said domain, as required by independent claims 7, 17, and 22.

Yoakum et al. were also cited by the Examiner for disclosing a request that is passed to subsequent proxy servers which performs a database look-up to determine if a message can be fulfilled. Applicants note that Yoakum is directed to a system for implementing a real-time

distributed, hierarchical database using a proxiabile protocol (see, Abstract). Yoakum does not address the issue of considering file type when redirecting web requests to a proxy server.

Thus, Yoakum et al. do not disclose or suggest redirecting said web resource request to a proxy server associated with said heavy file type, as required by independent claims 1, 13, and 21, as amended, and do not disclose or suggest determining if said web resource request is served by a domain having a traffic volume that satisfies one or more predefined criteria; and redirecting said web resource request to a proxy server associated with said domain, as required by independent claims 7, 17, and 22.

Jordan was also cited by the Examiner for its disclosure of a method for load balancing proxy cache servers by forwarding requests. Applicant notes that Jordan is directed to load balancing among cooperating cache servers and in particular to load balancing based on load conditions and a frequency that requests are forwarded from cooperating cache servers (col. 1, lines 6-9). Jordan does not address the issue of considering file type when redirecting web requests to a proxy server.

Thus, Jordan does not disclose or suggest redirecting said web resource request to a proxy server associated with said heavy file type, as required by independent claims 1, 13, and 21, as amended, and does not disclose or suggest determining if said web resource request is served by a domain having a traffic volume that satisfies one or more predefined criteria; and redirecting said web resource request to a proxy server associated with said domain, as required by independent claims 7, 17, and 22.

Dependent Claims 2-6, 8-12, 14-16 and 18-20

Dependent claims 3 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Braddy in view of Yoakum et al., claims 2, 4, 5, 14, and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Braddy and Yoakum in further view of Gampper et al., claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Braddy and Yoakum in further view of Smith, claims 8-11, 18, (19), and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sharma et al. in view of Jordan, and claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sharma and Jordan in further view of Smith.

Claims 2-6, 8-12, 14-16 and 18-20 are dependent on claims 1, 7, 13, and 17, respectively, and are therefore patentably distinguished over Braddy, Yoakum et al., Gampper et al., Smith, Sharma et al., and Jordan (alone or in any combination) because of their dependency from amended independent claims 1, 7, 13, and 17 for the reasons set forth above, as well as other elements these claims add in combination to their base claim.

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,



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Kevin M. Mason
Attorney for Applicant(s)
Reg. No. 36,597
Ryan, Mason & Lewis, LLP
1300 Post Road, Suite 205
Fairfield, CT 06824
(203) 255-6560